REMARKS

Claims 10-16, 24-26, 28-29, and 34 are pending. Claims 1-9 have been withdrawn. Claims 10-16, 24-26, 28-29, and 34 were rejected as anticipated by Landhammer (us patent 6,538,470). Claim 34 has been cancelled and new Claims 35-36 added. Applicants traverse the rejections.

The Examiner uses FIG. 9 of Landhammer as showing the I/O columns on the integrated circuit start at the top and end at the bottom of the floorplan (last paragraph of page 2 of the Office Action mailed May 3, 2006). This is incorrect. Landhammer specifically states in the Brief Description of Figures (col. 6) that "FIG. 9 is a diagram of an illustrative floor plan for a representative portion of a programmable logic device (e.g., the programmable logic device of FIG. 5) in accordance with the present invention". The programmable logic device of FIG. 5 has digital signal processing blocks 110 which may be included in column 126 of programmable logic device 106 (col. 14, lines 39-41). At col. 18, lines 11-12, "FIG. 9 illustrates one exemplary embodiment of digital signal processing block 110." Thus a column in Fig. 9 does not extend from one side of the IC to the opposite side of the IC, as Fig. 9 is part of Fig. 5 which has input/output interfaces 120 at the top of the IC (col. 14, lines 33-38).

Claim 10 includes among other features that each of the homogeneous columns starts at one side of the IC and ends at an opposite side of the IC. Landhammer does not disclose or suggest this feature. Landhammer in FIG. 5 shows a conventional FPGA with a perimeter ring of I/O interfaces ("FIG. 5 is a diagram of an illustrative top-level floor plan of one illustrative embodiment of a programmable logic device having columns of digital signal processing circuitry in accordance with the present invention." Col. 6, lines 12-15). Thus FIG. 5 of Landhammer is like Fig. 1 (FPGA 48) in the specification. As Landhammer is missing the above recited feature of Claim 10, Claim 10 should be allowable.

Claims 11-16 being dependent upon Claim 10 should be allowable for at least the reasons Claim 10 is allowable.

Claim 24 includes among other features that each of the columns starts at one side of the IC and ends at an opposite side of the IC. Thus for the reasons given above for Claim 10 Claim 24 should be allowable.

Claims 25-26 and 28-29 being dependent upon Claim 24 should be allowable for at least the reasons Claim 24 is allowable.

Claim 35 includes among other features that a second column of the plurality of homogeneous columns comprises a set of substantially identical input/output interface circuit elements. Claim 36 further recites that the input/output interface circuit elements are configured to allow data to be input or output to or from the IC.

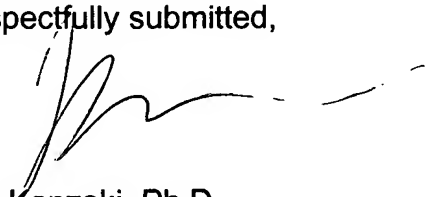
The I/O blocks 128 in Fig. 9 of Landhammer are Input/output interface circuitry 128 for digital signal processing block 110 (col. 15, lines 45-62). These are not the same as input/output interfaces 120 in Fig. 5 of the PLD 106, which are input and output circuits to the IC (col. 14, lines 33-38). Thus Landhammer does not disclose or teach a second column of the plurality of homogeneous columns comprises a set of substantially identical input/output interface circuit elements as recited in Claim 35. Thus Claim 35 and 36 should be allowable.

CONCLUSION

All claims should be now be in condition for allowance and a Notice of Allowance is respectfully requested.

If there are any questions, the applicants' attorney can be reached at Tel: 408-879-6149 (Pacific Standard Time).

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on June 2, 2006.

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